

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	White Creek Restoration
Proposed Implementation Date:	August , 2008
Proponent:	Rowe Excavation
Location:	Section 9, T 5South – Range 12W
County:	Beaverhead County

I. TYPE AND PURPOSE OF ACTION

Proponent wishes to access White Creek on State ground in Section 9 T5S – R12W with an excavator and front end loader for the purpose of restoring White Creek to a more stable condition. Damage to the drainage occurred after a hot fire burned the head end of the drainage and a high water event caused much damage to the erosive granitic soils in the drainage, severely altering the flows and channels of the creek. A large alluvial deposit restricted all flow to the South Fork of White Creek which in turn affected downstream users. The South Fork users hired a contractor to open the channel to allow water to flow for irrigation and stock water use. The work on the channel however was done with out a 310 permit and with out permission of the State. Unfortunately the work that was done was done poorly causing further problems for users of both channels.

To rectify a downward spiral of unfortunate circumstances the Beaverhead Conservation District and Montana DNRC made the following proposal to downstream users which was accepted by all involved. Rowe Construction of Dillon Montana would be hired by the landowners to redistribute flow evenly between the North and South Forks of White Creek and an attempt would be made to stabilize alluvial output into the two channels to the extent possible and practical. The landowners agreed to remain committed to the preservation and maintenance of the improvements to that end. The proponent has applied for a ten year Land Use License (LUL) for the restoration and maintenance of the White Creek drainage. All work would be performed with the permission of the Montana DNRC Dillon Unit Office and the Beaverhead Conservation District.

Rowe Construction will split the flow of White Creek evenly between the North and South Forks of the stream. He will then slow the flow of the creek through the construction of rock drops or vortex rock weir structures that will be convex to flow and be keyed into the stream bed and the banks of the stream. Excavated spoils will be hauled from the site or blended and contoured into adjacent topography. Upon completion of the project it will be seeded and fertilized with a native grass and forbs mixture to further help reduce runoff into the drainage and control the spread of weeds.

The final project out come will re-establish flow in both channels, provide for energy dissipation, reduce alluvial input into the stream, provide irrigation and stock water to down stream users, render road crossings by cabin owners accessible, and increase overall stream stability. These actions will probably not all be accomplished during the initial entry. Subsequent entries on to the property will be needed to achieve all the above mentioned objectives. Land owners will need to be involved and work with the Montana DNRC and the Beaverhead Conservation District to achieve a desirable conclusion to this project.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Montana DNRC Archeologist, Patrick Renee
Montana DNRC Hydrologist, Tom Hughes
Montana Fish Wildlife and Parks Fisheries Biologist, Richard Oswald
Beaverhead Conservation District
Downstream users of White Creek: (Tim Foster, Mike English, Tex Marchesseault, Cathy Weber, Jeffrey Slotta)

Lessee of the Section; Jim Becker
Contractor , Kelly Rowe of Rowe Excavation

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Beaverhead Conservation District, 310 Permit, (permit approved on 7/17/2008)
Montana DEQ issued a **318 Authorization** for this project. (7/17/2008) short term Water Quality Standard for turbidity related to construction activity.

3. ALTERNATIVES CONSIDERED:

Alternative A: No Action Alternative. Montana DNRC would not allow Rowe Excavation access to the property to restore the stream channel. No restoration work would be done to fix the damage incurred from natural events and from subsequent illegal activity in the stream channel. The stream would eventually stabilize but would have permanent consequences for downstream users.

Alternative B: Action Alternative. Montana DNRC would give the proponent a ten year LUL to stabilize White Creek , this will help reduce erosion, re-establish flow in both channels, provide for energy dissipation, reduce alluvial input into the stream, provide irrigation and stock water to down stream users, render road crossings accessible, and increase overall stream stability.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The soils in the White Creek drainage are made up of de-composed granite. The NRCS classifies these soils as 238 U –Como –Lowder-Lilylake families, complex, trough bottoms. The soils are made up of Glaciofluvial deposits derived from granite. The site where most of the alluvial material was deposited has slopes of 10- 15%. The steepness of the upper slopes caused the water event to move up to car sized boulders into the drainage which caused the South Fork of White Creek to completely plug up with rock, gravel, boulders, and debris. Productivity of these soil types is 6E.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The South Fork of White Creek is currently blocked from flow by a large alluvial fan that was formed due to a large rain event after a fire. Due to severe erosion and large scale run-off the stream washed down massive amounts of granitic soils, rock and boulder sized material and deposited the material where slopes started to mellow (slopes of 10- 15%). In addition much of the debris caused serious sedimentation and delivery of material into Grasshopper Creek in the Grasshopper Valley. During the field inspection with the 310 Board, the contractor, Kelly Rowe, the Fish Wildlife and Parks Biologist, Dick Oswald and DNRC Unit Manager the stream was running clear and movement of material was at a minimum.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

This project would have very little effect on air quality in the Grasshopper Valley.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

There currently is little vegetation growing where the alluvial deposits are located. A scattering of forbs is all that was observed during the field visit. Productivity of granitic soils is quite low and proponent plans to broadcast a mixture of grass and forbs and fertilizer once the initial work has been completed.

An NRIS search of the site revealed that Lemhi Beardtongue (***Penstemon Lemhienis***) was identified on section 9 in 2005. The population is apparently a health population (36 plants counted) and is distributed on a bench in open sagebrush above the existing road. The plant has not been identified where the project will take place. The plants were identified approximately ½ mile from the site of the project. The plant is listed as a sensitive species by the Forest Service (FS) and Bureau of Land Management (BLM). This project is not anticipated to cause any direct, indirect or cumulative effects to Lemhi Beardtongue.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The project will help improve the amount of sediment that is currently being delivered in to the Grasshopper Creek drainage. Although the amount of sediment that is currently being delivered has diminished since the initial delivery after the high water event Dick Oswald the Fish Wildlife and Parks biologist feels that it would be good to stabilize White Creek to reduce future delivery of material into Grasshopper Creek and eventually into the Beaverhead River. Fish passage into White Creek has also been curtailed due to the damage that the rain event caused in 2006.

No Westslope Cutthroat Trout (***Accipiter gentilis***) are found in White or Grasshopper Creeks. Although there are a number of drainages near the project that have Westslope Cutthroat in them, this project is not anticipated to have any direct, indirect or cumulative effects on the species or the habitat in the drainages where they live.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

An NRSI search identified five animal species of concern in the project area. The list includes the Gray wolf, wolverine, Canada Lynx, Great Grey owl, and northern goshawk;

Gray Wolf (***Canus Lupus***) Wolves are distributed throughout Southwest Montana and have been identified near the project area in the Pioneer Mountains in the Grasshopper Valley. The project would not have any measurable effect on wolf prey or wolves, thus direct, indirect, or cumulative effects are not anticipated.

Wolverine (***Gulo gulo***) Wolverine have relatively continuous habitat within the Pioneer Mountains and the Grasshopper drainage. The BLM and US Forest Service list the wolverine as a sensitive species. This project would not cause direct, indirect, or cumulative effects to wolverine or its prey.

Canada Lynx (***Lynx Canadensis***) Canada Lynx have been observed in the Pioneer Mountains and the project is located within this mountain range. Preferred lynx habitat is marginal for this proposed project area due to a

lack of desirable habitat conditions for lynx and their primary prey, snowshoe hares. Because of this there will be no direct, indirect, or cumulative effect to Canada lynx due to this proposed project.

Great Grey Owl (*Strix nebulosa*) Great Grey Owls have been identified near the project area (within ¼ of the project site). The Great Grey Owl has been identified as a sensitive species by the BLM. The large Douglas fir trees that the owls use for nesting and roosting will not be removed or damaged during this project. In addition once vegetation is re-established near the project site it should provide increase habitat for numerous rodents in the area. This may increase food for the owls. Overall though, this project is not anticipated to directly, indirectly, or cumulatively effect Great Grey Owls, their prey or habitat.

Northern Goshawk (*Accipiter gentilis*) Northern Goshawk is listed as sensitive species by the FS and BLM. The hawk was identified as present near the project site in 2005, (1 mile northwest of the project area). This LUL proposal will not remove the old growth Douglas fir trees that are present on the site that the hawk is dependent on for its food and nesting. This project is not anticipated to have any measureable effect on the Northern Goshawk or its nest and prey, thus direct, indirect, or cumulative effects are not anticipated.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Montana DNRC Archeologist Patrick Renee was contact about this project. He felt that there were no cultural resource concerns associated with this project.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed project is not visible from the main Grasshopper road which is a Forest Service scenic byway. The large Douglas fir trees at the sites location hide the area from tourists and homeowners view. The project area is currently severely disturbed and vegetation has just begun to re-establish on the site. Once the project is completed and re-vegetated the aesthetics of the area would be improved. During the restoration project there will be a short duration of traffic and noise but no long term damage to the aesthetics of the area are anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The Montana DNRC has considered Sections 4, 9 & 16, T 5S – R 12 W as possible candidates for a future timber sale harvest. The Douglas fir trees on these sections have sustained multiple years of damage and mortality from spruce budworm, and Douglas fir beetles. In addition the Lodge pole pine have sustained mortality from mountain pine beetles. The area is located near cabins and homes and the DNRC would like to reduce the potential risk to home owners in the area from fire as well as generate revenue for the trust before the value of the trees diminishes further. In addition a harvest will help increase the health and vigor of the trees left on site after the harvest. Hydrological effects from any harvest and road building would need to be considered prior to any harvest occurring.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

No other known projects by other agencies are being considered at this time.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain *POTENTIAL IMPACTS AND MITIGATIONS* following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The possibility of additional traffic on the homeowner roads is a safety risk as well as the possibility of starting a wildfire during the operational phase of this project. In addition people could be hurt while equipment is being operated on the restoration project. Mitigation measures would include having the contractor contact the neighbors prior to operations beginning to let them know that additional traffic will be on the roads and to remind them to stay away from working equipment. Signs should also be temporarily put up to make people aware of the danger. Contractor would need to follow all State fire regulations.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The project will have no anticipate effects on the grazing lease of Jim Becker.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The project initially will provide approximately two to three weeks of work for Kelly Rowe Excavation.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

This proposal will not have very little effect on the State tax base or tax revenues generated.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

The project will have little effect on demand for government services. Once the initial project is completed the DNRC and the Beaverhead Conservation District would need to be involved if any further actions are needed to meet the proposals overall objectives.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

No known zoning or management plans and or goals are identified in the area of this proposal.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

The existing two tract road leading to the project area will be improved to allow access of the excavator and front end loader. The road is currently not open for public access and the Montana DNRC doesn't plan to open

this road in the future. Minor improvements of the road would provide and allow better administrative access for managing State trust lands in the future.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

This project will have no affect on density and distribution of the local population or on the amount of housing in the area.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

This project will not affect social structures and mores.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

It is not believed that this proposal will directly or indirectly effect the uniqueness of the Grasshopper Valley.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The DNRC would only charge \$150.00 to the proponent for this project. The project would not generate much revenue for the trust; however there is an obligation by a land owner especially the State to work with ones neighbors for the overall good of the adjoining landowners and society as a whole. The natural disasters that occurred to White Creek and the resulting poor judgments and decisions made by some of the folks involved in this proposal caused divisions and possible lawsuits between some of these neighbors. By working with the local Beaverhead Conservation District and the Montana DNRC a reasonable proposal was formed and presented. This proposal can have many benefits to the neighbors of this state section and longer term benefits to the resources in the area as well as benefits to over all Montana population.

As mentioned earlier these benefits would include; reduce erosion and delivery of sediment to Grasshopper Creek, re-establish flow in both channels of White Creek, provide for energy dissipation, reduce alluvial input into the stream, provide irrigation and stock water to down stream users, render road crossings to cabins accessible, and increase overall stream stability.

EA Checklist Prepared By:	Name: Tim Egan	Date: 8/10/2008
	Title: Dillon Unit Manager	

V. FINDING

25. ALTERNATIVE SELECTED:

Issue Land Use License allowing restoration work on the stream

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Significant impacts are not anticipated to occur as a result of the proposed activities. The project has been designed and reviewed by specialists to correct damage which resulted from unauthorized activities. This project will improve conditions in the stream channel and water distribution downstream.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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EIS

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More Detailed EA

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No Further Analysis

EA Checklist Approved By:	Name: Garry Williams
	Title: Area Manager, Central Land Office
Signature: /S/ Garry Williams	
Date: 8/11/08	

